

BQ.1 and BQ.1.1 are now the dominant COVID variants. What does that mean?

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The virus that causes COVID-19 is bringing more variants our way, requiring a few changes to the fight against it.

The BA.5 variant of Omicron, which has dominated the U.S. since early summer, is fading fast. According to data released Friday, half the cases in the U.S. are now due to two descendants of BA.5, called BQ.1 and BQ.1.1.

Not much is known about those two variants, but the severity and duration of disease seem similar to the other Omicrons, and milder than the original and delta variants.

The biggest challenge from the new variants will be for people who are immunocompromised because of disease or medications. Treatments designed to prevent and treat infection in the immunocompromised won't work against BQ.1 and BQ.1.1.

Here's what we know:

What is the current COVID variant and what happened to Omicron?

The Omicron variant that caused so many infections last winter is still around, but it has split into many subvariants. The two subvariants—BQ.1 and BQ.1.1—now account for half of COVID-19 cases in the U.S., according to the Centers for Disease Control and Prevention.

BA.5 now accounts for 24% of cases.

Are the BQ.1 and BQ.1.1 more dangerous?

Lab studies suggest the viral descendants of BA.5 and BA.2, which includes all the new dominant variants, might cause slightly more [severe disease](#) than BA.1 or the original Omicron, said Jeremy Luban, a

professor of molecular medicine, biochemistry and molecular biotechnology at UMass Chan Medical School.

But it's not clear whether that's true in the [real world](#), he said, as [lab studies](#) can't capture factors like human behavior.

The new variants are clearly more transmissible because they are taking over and making people sick despite previous vaccinations and infections, he said in a Thursday news conference with other members of the Massachusetts Consortium on Pathogen Readiness.

Will vaccines and the bivalent booster still work against Omicron variants?

Yes.

"Any kind of boost really reduces your chances of getting very sick from COVID," said Dr. Kathryn Stephenson, an infectious disease expert at Beth Israel Deaconess Medical Center in Boston.

People who got the bivalent booster will be more protected against a severe COVID-19 infection compared with those who are unvaccinated or got a vaccine long ago.

In a study posted Friday, Pfizer and its vaccine partner BioNTech say that the latest booster increases the level of neutralizing antibodies against both BQ.1 and BQ.1.1, which protect against infection.

Moderna reported similar results for its booster earlier in the week, and it said last week that its bivalent shot also showed "robust neutralizing activity" against the BQ.1.1 variant, suggesting it offers some protection against the newest strains.

What does BQ stand for?

The World Health Organization uses the Greek alphabet as a classification system to simplify understanding and avoid stigmatizing countries where strains of the SARS-CoV-2 virus that causes COVID-19 are identified.

The WHO named the original B.1.1.529 variant after the 15th letter, Omicron. Within variants, the agency assigns numbers to sublineages.

BA.5 was classified as an Omicron variant but has mutations that distinguish it from other Omicron subvariants, such as BA.1 and BA.2. BA.5 is the parental strain of BQ.1 and BQ.1.1.

What are the symptoms of the new Omicron variants?

The symptoms of BQ.1 and BQ.1.1 appear to be the same as for other COVID-19 variants. The most common symptoms include exhaustion, fever, a cough, congestion, shortness of breath, sore throat, nausea, diarrhea, and muscle aches or headache. Loss of smell, which originally characterized COVID-19 infections, is no longer as common.

Can I get BQ.1 or BQ.1.1 if I've had BA.5?

Yes. Theoretically anyone is vulnerable if exposed to enough viral particles. But people who have been boosted or infected within the last three to six months are less likely to be infected again and certainly less likely to suffer severe disease, Stephenson said.

What to do if I get infected by BQ.1 or BQ.1.1?

If you test positive for the coronavirus or feel sick with related

symptoms, the CDC recommends:

- Stay home for at least five days and isolate from other household members
- Wear a well-fitted mask around others in the home

If you're fever-free for 24 hours and symptoms improve after the five days, the CDC says you can end isolation, but take precautions for five additional days. This includes wearing masks and avoiding travel.

What if I have a compromised immune system?

This is a "pretty scary" time for people who don't have good working immune systems, either because of older age, diseases like cancer, or treatments that reduce immunity, Luban said.

The last two protective monoclonal antibodies don't work against the BQ.1 and BQ.1.1 variants, said Jake Lemieux, an infectious disease specialist at Massachusetts General Hospital.

That includes Evusheld, which was used to prevent severely immunocompromised people from getting very sick with COVID-19. It's a big loss, he said: "I do hope there will be a replacement drug for prophylaxis that retains activity against circulating variants."

Flu, RSV and COVID: What to know about the 'tripledeemic'

Doctors are saying we're currently in a "tripledeemic" with three [respiratory viruses](#), including COVID-19, flu and RSV circulating simultaneously.

Vaccinating against both flu and COVID-19 will help limit severe infections, said Dr. William Schaffner, an infectious disease specialist at the Vanderbilt University School of Medicine.

There are currently no vaccines or specific treatment for [respiratory syncytial virus](#), or RSV, which can infect people repeatedly and are particularly dangerous for the very young and very old, he said.

It's not clear why, but both flu and RSV are circulating much earlier this year than they did before the pandemic, said Dr. Tina Tan, vice president of the Infectious Diseases Society of America, which held a news conference Friday that included her and Schaffner.

"Whether or not these will go back to normal (in future years), nobody knows," she said.

Tan, a pediatrician at the Ann & Robert H. Lurie Children's Hospital of Chicago, said she knows everyone is ready for a "new normal," but she worries that not enough people are getting COVID-19 boosters and annual flu shots, and that children and adults have fallen behind on other routine vaccinations as well.

"Vaccines need to be part of that new normal to prevent individuals from becoming ill with the viruses and bacteria that are circulating," she said. "That is the new normal."

Can we have a COVID-free Thanksgiving? Here are some tips.

Extreme precautions are no longer needed, experts say. But Lemieux said people should be careful if they have very young, very old or immunocompromised people at their holiday gatherings.

He suggests guests use a home COVID-19 test before sitting down

together in an enclosed space and that people who are sick shouldn't go at all.

"I don't want to say 'cancel Thanksgiving,' but I also don't want to say 'don't worry about respiratory viruses,'" said Lemieux, who also worries about the flu and RSV getting passed around along with the turkey.

Some things to keep in mind:

- If you develop cold symptoms, get tested for COVID-19: Take a test right away because the antiviral Paxlovid, which can help prevent severe disease in high-risk people, works only if given within five days of infection.
- If you're traveling, wear a mask: Masking while traveling to celebrations also makes sense, said Dr. Lael Yonker, a pediatrician at Massachusetts General Hospital. She's had her children wear masks leading up to the holiday.
- Get vaccinated against the flu and COVID-19: For Schaffner's family gathering, everyone must be vaccinated against flu and boosted against COVID-19, he said. "No one wants to be a dreaded spreader," he said.

When can we stop worrying about new variants?

Experts have been waiting for the virus that causes COVID-19 to settle into a seasonal pattern and stop mutating so much, but it hasn't happened yet. While current vaccines are considered safe and very effective against severe disease, they do not prevent all infections.

Next-generation vaccines, currently under development, could provide broader or longer-term protection against COVID-19. Companies are also exploring delivering the vaccine through the nose rather than by shots, which might provide more protection against infection.

Pfizer and BioNTech announced Wednesday that they have started a 180-person early-stage trial of a new candidate vaccine they hope will broaden and extend protection against the virus. The new vaccine will target the "spike" protein on the surface of the original virus plus the version of spike on the BA.5 variant, as well as a nonspike protein that doesn't seem to be mutating as much.

The trial will include three different doses and variations to see if the candidate vaccine is better than the current one.

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